

Information Paper:

Date: 16 March 2004

Subject: Savannah River Basin Comprehensive Study; TNC Springtime Pulse;
15-17 March 2004.

1. Purpose:

This is the first of two proposed pulses in coordination with TNC, USF&W, and the state DNR's to monitor fish passage at the NSBL&D and monitor lower river flood plain inundation and extent. TNC proposal consists of higher pulses of various values every spring as a physical component of the Savannah River Basin Comprehensive Study. This long-term study and modeling effort is to examine and evaluate different allocation and operational scenarios to determine if the river should be managed differently in consideration future demands and uses.

2. Collaborative Effort:

- a. The Corps can accommodate TNC proposals and provide approval based on inflow conditions and water storage availability on a case-by-case basis. These higher pulses can be made as long as we do not adversely impact other project purposes or users.
- b. The Corps planned for this higher flow well in advance by holding additional winter flood storage at Hartwell where we maintained it near 660 ft. msl. In other words, we did not lower the Hartwell pool elevation to 656 ft. msl for a winter drawdown. We have adequate water storage to accommodate this first pulse in March for three days. However, the second pulse, planned for early April is jeopardized due to sparse rainfall in the basin over the last month. Our current pool projections indicate that we will be 0.06 ft. above rule curve elevation of 658.84 ft. msl on Hartwell Lake and 0.25 ft. above rule curve elevation 328.58 ft. msl on JST Lake after this first March pulse.

3. Pertinent Facts:

- a. The JST generation releases will be increased to a daily average release of 16,000 for three days.
- b. Flows may be a little higher at the NSBL&D due to additional inflow from below JST.
- c. The weather prediction is for very slight to no rainfall this week; we've had less than 1/2 inch of rainfall over the Hartwell Basin in the last month and even less rainfall over the RBR and JST Basins.
- d. Very little river rise will be experienced between Augusta and above the NSBL&D.

- e. The river comes out of its banks with a 16,000 cfs plus flow into low elevation floodplains from Butler Creek to the estuaries above Savannah Harbor.
- f. Some higher velocities can be expected with this flow, but nothing more than we have routinely passed in the river many times in the recent past.
- g. Recent pulses: On 23 February thru 26, 2004 February flows out of JST were around 14,500 cfs, last spring we provided a 15,000 cfs pulse from JST for fish passage that probably approached 16,000 cfs at the NSBL&D, due to additional inflows from below JST. Twice in the last year we have provided ten day 20,000 cfs pulses to facilitate a contractor's barge movement and removal of two nuclear core reactor vessels for the Savannah River Site decommissioning activities.